

01.04. USGS 10 meter Digital Elevation Model

1.0 File Format, Name and Directory

ESRI ArcView grid theme composed of several files in a data structure composed of multiple directories.

2.0 Theme Metadata

Metadata descriptions provided by USGS with downloaded DEM data.

3.0 Description

The Digital Elevation Model (DEM) is the terminology adopted by the USGS to describe terrain elevation data sets in digital raster form. The standard DEM consists of a regular array of elevations projected on a geographic coordinate system. DEM data are stored as a series of profiles in which the spacing of the elevations along and between each profile is in regular whole number intervals. The most common spacings in DEM's distributed by USGS are 10 and 30 meters. Seamless DEM coverage is available for the continental U.S. and is distributed through the internet by USGS in several formats including ESRI Grid.

DEM's provide elevation data for many terrain analysis operations including orthorectification of aerial images, extraction of topographic drainage basins, delineation of topographic contours, and extraction of land slope orientation. DEM's support a wide variety of applications in natural resources management, watershed planning, flood plain management, river basin studies, and hydrography.

4.0 Projection

Universal Transverse Mercator Zone 11 North, North American Datum of 1927.

